

Patent claims

1. An erasing and cleaning apparatus for cylindrical surfaces, in particular of printing form and blanket cylinders of a printing press, with the aid of a cleaning cloth which can be moved by cleaning cloth transport means (1, 2, 3), the latter interacting with a positioning unit (5), for the operational position and for moving to further positions, and with a drive, the cleaning cloth transport means (1, 2, 3) together with the cleaning cloth being packaged in an independent cassette (4) and it being possible to exchange them in this form, and the positioning unit (5) being arranged in the printing press with side walls (8, 9) in the form of running gear having a drive for the cassette (4), characterized in that a lateral guidance means for the positioning unit (5) is arranged in the printing press at side parts thereof in the form of a carriage (6) which can be moved by means of pneumatic or hydraulic means (22, 25) transversely onto the cylindrical surface to be cleaned and can be moved away again from the latter, in order to move to a defined out-of-contact position (III) for the lateral exchange of a cassette (4) from the positioning unit (5), and at least one coupling module (30) is assigned to the carriage (6) for coupling, decoupling and removing the form-fitting and force-transmitting connection of one of the side walls (8 or 9) of the positioning unit (5) to the cassette (4).
2. The erasing and cleaning apparatus as claimed in claim 1, characterized in that the carriage (6) of

the positioning unit (5) is configured as pairs of double rails (20, 23 and 21, 24) which can be displaced telescopically with respect to one another, are attached to the side parts of the printing press and on which a superstructure (7) for accommodating the cassette (4) is arranged in the form of two side walls (8, 9) which are connected via a crossmember (10).

3. The erasing and cleaning apparatus as claimed in claim 1 or 2, characterized in that the pairs of double rails (20, 23 and 21, 24), along which the positioning device (5) can be moved transversely by means of a pneumatic or hydraulic means (22), are realized in the form of rails (23, 24) which are fixed rigidly in the printing press on both sides of the superstructure (7) and on which the movable rails (20, 21) are placed by means of a carriage (27), and the carriages (27) which are rigidly connected to the movable rails (20, 21) can be actuated by means of a further pneumatic or hydraulic means (25), with the result that the rails (20, 21) can be displaced on the unmovable rails (23, 24), while the positioning device (5) can be moved independently thereof on the movable rails (20, 21).

4. The erasing and cleaning apparatus as claimed in claim 3, characterized in that the removable side wall (8 or 9) interacts with the coupling module (30) which is firstly pivotably mounted with the removable side wall (8 or 9) on one of the transversely movable rails (8 or 9), and secondly shaft journals (1', 2', 3') by means of which it is possible to produce a form-fitting and force-

transmitting connection to the cleaning cloth transport means (1, 2, 3) of the cassette (4), the shaft journals (1', 2', 3') being mounted in the housing 31 of the coupling module 30 in a spring-loaded manner and being secured against the spring force by means of cams (34) of a transversely movable cam element (32).

5. The erasing and cleaning apparatus as claimed in claims 3 and 4, characterized in that the cam element (32) can be acted on by means of a pivotably mounted pneumatic or hydraulic cylinder (33), in such a way that, when it is acted on, the cam element (32) is moved transversely, the cams (34) of the cam element (32) are displaced together with it and therefore terminate the force counter to the spring force acting on the spring-loaded shaft journals (1', 2', 3'), with the result that the latter are moved into the interior of the housing (31) of the coupling module (30) by the spring force and are decoupled from the cleaning cloth transport means (1 to 3), it being possible, if the side wall (8 or 9) is removed, to expose the cassette (4) for exchange on this side by a corresponding movement of the rail (20 or 21) and to remove or exchange it laterally from the positioning unit (5) and therefore laterally from the printing press.

6. The erasing and cleaning apparatus as claimed in claims 3 to 5, characterized in that a further cam element (38) and spring-loaded shaft journals (36, 37) are provided for further cleaning cloth transport means in an analogous manner.

Abstract**Erasing and cleaning apparatus for cylinders, in particular printing form and blanket cylinders of a printing press**

In order to make it easier to exchange the cleaning cloth and shorten the time of this exchange in an erasing and cleaning apparatus for cylindrical surfaces, in particular of printing form and blanket cylinders of a printing press, with the aid of a cleaning cloth which can be moved by cleaning cloth transport means (1, 2, 3), the latter interacting with a positioning unit (5), for the operational position and for moving to further positions, and with a drive, the cleaning cloth transport means (1, 2, 3) together with the cleaning cloth being packaged in an independent cassette (4) and it being possible to exchange them in this form, and the positioning unit (5) being arranged in the printing press with side walls (8, 9) in the form of running gear having a drive for the cassette (4), in particular in order that said exchange can also be performed when a paper web is tensioned in the printing unit and the printing press is running, it is proposed that a lateral guidance means for the positioning unit (5) is arranged in the printing press at side parts thereof in the form of a carriage (6) which can be moved by means of pneumatic or hydraulic means (22, 25) transversely onto the cylindrical surface to be cleaned and can be moved away again from the latter, in order to move to a defined out-of-contact position (III) for the lateral exchange of a cassette (4) from the positioning unit (5), and at least one coupling module (30) is assigned to the carriage (6) for coupling, decoupling and removing the

form-fitting and force-transmitting connection of one of the side walls (8 or 9) of the positioning unit (5) to the cassette (4).

Fig. 3

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